



Focus on TREE

from Ecology's Technical Resources for Engineering Efficiency team

Generate less waste and save money!

What is TREE and how can it benefit your business?

The Technical Resources for Engineering Efficiency (TREE) program is a free technical-assistance service for businesses. The TREE team is a group of Ecology engineers and scientists with expertise in industrial processes and pollution prevention. The team finds ways for businesses to reduce waste, increase efficiency and save money.

TREE typically works with three to five companies per year. Since its inception in 1998, the team has made suggestions that could:

- Save the companies a total of \$920,000 each year,
- Reduce hazardous-waste generation by 229,000 pounds each year, and
- Reduce water use by 154 million gallons annually.

The successful TREE team earned the Governor's Award for Service & Quality Improvement and was also commended by Governor Gary Locke in his "Governing for Results" report.

"The presence of the TREE team sensitized Skills to the importance of saving natural resources. The savings in reduced operation costs has allowed us to devote more effort to our charitable mission."
Charlie Harris,
Skills, Inc.
Chief Executive
Officer

How do I know if my business is a potential TREE candidate?

The ideal candidates for TREE projects are small-to-medium-sized industrial facilities that are willing to work with Ecology to optimize resource use. Applications are available from the Ecology Web site or you can contact the team lead noted at the end of this Focus sheet. If you are not certain you fit the profile or would like to discuss eligibility, contact the team lead.

How are businesses selected as TREE projects and what are the initial steps in the process?

The TREE team uses the following criteria to select a facility:

- There is potential to reduce the effect the facility has on the environment.
- There is potential to improve process efficiency, save money and reduce waste.
- The facility is willing to work in good faith with the TREE team.
- The facility would be willing to implement system changes where economically feasible.
- The facility's management wants TREE assistance, due to the lack of in-house engineering staff or minimal experience with pollution-prevention implementation.

"This was a very successful project!"
Don Wilson,
Basin Frozen Foods
Process Manager

Once your facility is selected for TREE assistance, the team will make several visits to gather information about your processes. A report is developed with specific recommendations on how you can reduce waste generation, reduce resource consumption and increase savings. It is up to you to decide whether or not to implement these pollution-prevention opportunities. Many TREE-suggested opportunities have been implemented by project facilities, to their benefit.

What has TREE done for Washington businesses?

Skills, Inc., metal finishing facility. Suggested improvements should:

- Save Skills more than \$53,000 per year,
- Eliminate 32,300 pounds of hazardous-waste each year, and
- Reduce water use by 1,600,000 gallons per year.

Basin Frozen Foods, food processor. Suggested optimization of the processes:

- Saved 40 million gallons of water per year, and
- Saved \$80,000 annually in associated costs.

Rainier Ballistics, bullet manufacturer. Implementing TREE findings can:

- Reduce water use by about 116,000 gallons a year
- Save \$27,000 annually, and
- Reduce hazardous waste by more than 20,000 pounds each year.

Saint Gobain, crystal manufacturer. Implementation of waste audit:

- Reduced boron carbide solid waste by 44 percent or 42 tons per year, and
- Could save \$47,000 annually.

How do I contact TREE?

Visit our Web site at:

<http://www.ecy.wa.gov/programs/hwtr/tree>

Contact the team directly:

James DeMay, P.E. 360-407-6338

or jade461@ecy.wa.gov

"I found the entire TREE team to be very courteous, professional and of incredible value to my firm. They helped show us ways to possibly save money, while at the same time reducing the amount of hazardous waste we create."
Eric Hampton,
Rainier Ballistics
General Manager

"TREE is an excellent way to learn new ideas!"
Yvonne Cox,
Saint Gobain
HR/HSE Manager

If you require this document in alternate format, please contact the Hazardous Waste & Toxics Reduction reception desk at 360-407-6700 (voice) or 711 or 800-833-6388 (TTY.)